

In the claims:

Claims 1-15 (canceled)

16. **(currently amended)** A method of obtaining predominantly one enantiomer from a mixture of enantiomers, comprising the steps of:
- a. contacting an aqueous fibrous protein solution with a solvent that is not miscible with water, wherein the fibrous protein is selected from the group consisting of silk, collagens, keratins, actins, chorions, and seroins;
  - b. allowing the solution in contact with the solvent to age at about room temperature or under conditions preventing evaporation or both;
  - c. allowing the enantiomers of the mixture to diffuse selectively into the resulting fibrous protein smectic hydrogel in solution;
  - d. removing the smectic hydrogel from the solution;
  - e. rinsing predominantly a first enantiomer from the surface of the smectic hydrogel; and
  - f. extracting predominantly a second enantiomer from the interior of the smectic hydrogel.
17. **(canceled)**
18. **(original)** The method of claim 16, wherein the fibrous protein is silk.
19. **(original)** The method of claim 16, wherein the fibrous protein solution is present in greater than about 4% by weight.
20. **(original)** The method of claim 16, wherein the fibrous protein solution is present in greater than or equal to about 8% by weight.
21. **(original)** The method of claim 16, wherein the fibrous protein solution is present in greater than about 4% by weight and the fibrous protein is silk.
22. **(original)** The method of claim 16, wherein the fibrous protein solution is present in greater than or equal to about 8% by weight and the fibrous protein is silk.

23.     **(original)** The method of claim 16, wherein the smectic hydrogel is a bulk solid hydrogel comprising several ordered layers of the fibrous protein.

Claims 24-48 **(canceled)**

49.     **(new)** The method of claim 16, wherein the solvent is selected from the group consisting of hexane, chloroform, and iso-amyl alcohol.